STUDIES IN THE TREATMENT OF MALARIA

XX. INTRAMUSCULAR INJECTIONS OF COLLOSOL MANGANESE IN SIMPLE TERTIAN MALARIA

BY

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This preparation, supplied to us by the Crookes' Laboratories, was tried in fifteen cases.

The drug was injected intramuscularly, I c.c. on each of two consecutive days in fourteen cases (1171-1184) and I c.c. on each of three consecutive days in one case (1185). All the cases were adult males, infected either in Macedonia, East Africa or Egypt. In each instance a diagnosis of simple tertian malaria was made microscopically, and in all cases parasites were present in the blood on the day treatment commenced. Blood examinations were made daily.

The results are given in the Table, which also contains the following additional information:—Place of infection and interval in

Parasitic records after intramuscular injections of Collosol manganese in simple tertian malaria.

TABLE

| E. = Egypt. E.A. = East Africa. S. = Salonika.

| 12th day after | Neg. | ÷ | Ü | Neg. | Neg. | Neg. | T. | Neg. | : | : | Ť. | Ę. | Ŧ. | : | T.G. |
|---|------------------|---------|---------|---------|---------|---------|---------|---------|--------------|-------------|-------------|---------|-------------|------------------|------------------------|
| uth day after | T.G. | Neg. | Neg. | Neg. | Neg. | Neg. | Ť. | Neg. | : | : | : | Neg. | Ncg. | : | Neg. |
| roth day after | T.G. | Neg. | Neg. | Neg. | ř. | Neg. | Neg. | T.G. | T.G. | : | : | Neg. | Neg. | T.G. | T.G. |
| 9th day after | Ξ. | Neg. | T. | Neg. | 7. | Neg. | T. | T.G. | T.G. | : | : | T.G. | Neg. | Ö | T.G. |
| 8th day after | Neg. | Neg. | T. | Neg. | E. | Neg. | Ŧ. | T.G. | ပ် | : | : | Neg. | | T.G. | T.G. |
| 7th day after | Ö | Neg. | T.G. | Neg. | Ξ. | Neg. | £. | T.G. | | : | : | Neg. | Ë. | T.G. | T.G. |
| 6th day after | Ŧ. | Neg. | T.G. | Neg. | Ξ. | T.G. | ÷. | T. | | T.G. | : | Neg. | Ö | T.G. | T.G. |
| 5th day after | T.G. | Neg. | Ţ. | Neg. | T. | ÷ | T.G. | 7. | Neg. | T.G. | : | Neg. | Neg. | Ţ. | T.G. |
| 4th day after | T.G. | ÷. | T.G. | Neg. | Neg. | T. | T. | Ţ. | Neg. | T.G. | | Ncg. | Ċ. | T.G. | Neg. |
| 3rd day after | T.G. | £. | - | Neg. | Neg. | T.G. | T.G. | Ë | Neg. | T.G. | T.G. | Neg. | T.G. | T. | |
| 2nd day after | T.G. | T.G. | ö | Neg. | Ť. | T. | T.G. | Ċ. | Neg. | T.G. | T.G. | ÷. | Ö | T.G. | T.G.* |
| 18t day after | T.G.* | T.G.* | *.I. | Ncg.* | *. | *: ° | T.G.* | Neg.* | Ncg.* | T.G.* | T.G.* T.G.* | Neg.* | T.G.* | T.G.* | T.G.* |
| Day of first injection | T.G.* T.G.* T.G. | T.G.* | T.* | *:T | ¥ | *: | *: | *: | T.* | T.G.* T.G.* | T.G.* | T.* | T.G.* T.G.* | T.G.* T.G.* T.G. | T.G.* T.G.* T.G.* T.G. |
| Date of end of treatment | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 27.9.18 | 81.6.72 | 27.9.18 |
| Interval (in months) between arrival in Bugland and present treatment | -1- | ы | ++ | 15 | m | 4 | 9 | 60 | 7 | n | 9 | + | 100 | m | rs. |
| Interval (in months) (in months) between between leaving arrival in infected Bigland and area and present treatment treatment | + | ۲n | īV | 19 | 20 | + | 9 | + | × | 7 | 9 | 7 | 4 | 7 | + |
| Interval (in months) between first (first admission to a hospital with malaria and present | 77 | 13 | 54 | 92 | 15 | 26 | 13 | 37 | + | 01 | 23 | 15 | +1 | IO | 24 |
| Place of in- fection | % | ઝં | ઝં | E.A. | š | s, | š | ഥ | š | s. | ŝ | ý | s, | E.A. | ú |
| Number of | 11711 | 1172 | 1173 | 1174 | 1175 | 9411 | 1177 | 8/11 | 6/11 | 0811 | 1811 | 1182 | 1183 | 1184 | 1185 |

months between present treatment and (a) first admission to a hospital for malaria, (b) leaving infected area, (c) arrival in England.

In the Table:—

T. = simple tertian trophozoites or schizonts.

G. = simple tertian gametes.

Neg. = no parasites found.

* = intramuscular injection of I c.c. of collosol manganese.

CONCLUSION

Collosol manganese in the doses used is of no value in the treatment of simple tertian malaria.